

Crystal Data: Orthorhombic. *Point Group:* 2/m 2/m 2/m. As tabular grains, to 0.15 mm.

Physical Properties: *Cleavage:* None discernable. *Fracture:* Conchoidal.
Tenacity: Brittle. *Hardness* = ~ 5.5 *D(meas.)* = n.d. *D(calc.)* = 5.09

Optical Properties: Opaque. *Color:* Steel gray. *Streak:* Black. *Luster:* Metallic.
Optical Class: n.d.

R (synthetic TiFeSi₂): (400) 26.41, (470) 34.90, (546) 37.45, (589) 42.10, (650) 43.86

Cell Data: *Space Group:* Pbam. *a* = 8.6053(10) *b* = 9.5211(11) *c* = 7.6436(9) *Z* = 12

X-ray Powder Pattern: Luobusha mining district, Shannan Prefecture, Tibet, China.
2.1291 (100), 2.0251 (65), 1.9155 (57), 3.8358 (50), 2.2318 (50), 2.3010 (30), 1.2996 (20)

Chemistry:	(1)	(2)
Fe	34.31 – 35.38	34.92
Si	33.56 – 36.10	35.13
Ti	27.67 – 29.35	29.95
Cr	n.d. – 1.01	
Mn	n.d. – 1.03	
Zr	n.d. – 1.52	
Al	n.d. – 1.60	
Total		100.00

(1) Luobusha mining district, Qusum county, Shannan Prefecture, Tibet, China; range of 10 electron microprobe analyses, corresponding to (Ti_{0.99}Zr_{0.01})(Fe_{1.01}Cr_{0.02}Mn_{0.02})(Si_{2.00}Al_{0.03}).

(2) TiFeSi₂.

Occurrence: In a heavy mineral separate from mining podiform chromitites hosted in harzburgite in an ophiolite complex.

Association: Native silicon, an unidentified Fe-Si mineral.

Distribution: No. 31 orebody, group II in the Luobusha mining district, Qusum county, Shannan Prefecture, Tibet, China.

Name: For the Yarlong Zangbo River (also known as the Brahmaputra River) that flows near the first described locality.

Type Material: Geological Museum of China (Beijing), (M11651).

References: (1) Guowu, L., F. Quingsong, S. Nicheng, B. Wenji, Y. Jingsui, X. Ming, M. Zhesheng, and R. He (2009) Zangboite, TiFeSi₂, a new mineral species from Luobusha, Tibet, China, and its crystal structure. *Can. Mineral.*, 47, 1265–1274. (2) (2010) *Amer. Mineral.*, 95, 1124 (abs. ref. 1).